INDEX TO *Proceedings*

AMERICAN CONCRETE INSTITUTE

VOLUME 47—1951

From JOURNAL OF THE AMERICAN CONCRETE INSTITUTE, V. 22, Sept. 1950 to June 1951 and Part 2, December 1951

Original contributions to the JOURNAL OF THE AMERICAN CONCRETE INSTITUTE—papers, reports and discussions—are indexed in three categories;

1. Title ..... **Some observations on the use of reinforcing steel in concrete pavements** (**47**-1) Bengt F. Friberg Sept. 1950..... 1

2. Author ..... **Friberg, Bengt F.**—Some observations on the use of reinforcing steel in concrete pavements (**47**-1) Sept. 1950..... 1

3. Subject ..... **Steel**—Reinforcing (**47**-1) Sept. 1950..... 1

Numbers in parentheses with each entry constitute the title number of the article. The bold face portion indicates the number of the *Proceedings* volume (in this case V. 47) in which the topic appears. The month and year indicate the JOURNAL issue. Page numbers of both *Proceedings* and JOURNAL are the same.

Letters from Readers items include "LR" in the parentheses: **Consistency meters** (**LR 47**-59) Sept. 1950.. 73

again the bold face number is the *Proceedings* volume number.

The index to Current Reviews published in this volume begins on p. 865

A

Accelerators
–(**47-3**) Sept. 1950 32
–(**47-31**) Feb. 1951 417
ACI's place in a billion dollar industry (**47-42**) Apr. 1951 581
Admixtures
–Air-entraining (**47-3**) Sept. 1950 26
–Alkali - aggregate reaction — Evaluation (**47-3**) Sept. 1950 43
–Butyl stearate—Calcium chloride—Dampproofing—Finely divided materials (**47-3**) Sept. 1950 46
–Concrete products (**47-3**) Sept. 1950 32
–Correcting aggregate gradation — Proportioning—Selection (**47-3**) Sept. 1950 36
Admixtures in concrete—Introduction (**47-3**) Sept. 1950 25
Age of concrete (**47-31**) Feb. 1951 417
Agents—Waterproofing (**47-3**) Sept. 1950 46
Aggregate
–Cooling plant (**47-54**) June 1951 821
–Gradation (**47-9**) Oct. 1950 141
Air—Determination in hardened concrete (**47-7**) Oct. 1950 117
Air content
–No-fines concrete (**47-55**) June 1951 833
–Optimum (**47-3**) Sept. 1950 26
Air content in concrete—Computation (**LR 47-61**) Sept. 1950 74
Air-entraining agents
–(**47-3**) Sept. 1950 32
–Packaged (**LR 47-82**) May 1951 747
Air-entraining cements—Use (**LR 47-63**) Sept. 1950 76
Air-entraining concrete—Finishing (**47-28**) Jan. 1951 373
Air entrainment
–Effect (**47-3**) Sept. 1950 26
–Pavement concrete (**47-6**) Oct. 1950 93
Air replaces sand in "no-fines" concrete (**47-55**) Rudolph C. Valore, Jr. and William C. Green June 1951 833
Alkali—Solubility (**47-10**) Oct. 1950 153
Alkali-aggregate expansion corrected with portland-slag cement (**47-40**) Federico Barona de la O Mar. 1951 545
Alkali-aggregate reaction—Corrective admixtures (**47-3**) Sept. 1950 43
Allen, Charles W.—Finishing air-entraining concrete pavements (**47-28**) Jan. 1951 373
Amirikian, Arsham—Precast concrete offers protection against atomic blast (**47-37**) Mar. 1951 497
Analysis of continuous circular curved beams (**47-15**) Becla Velutini Nov. 1950 217
Analysis of three-dimensional beam-and girder framing (**47-5**) Phil M. Ferguson Sept. 1950 61
Anchorage—Reinforcement (**47-43**) Apr. 1951 589
(**47-18**) Dec. 1950 269
Anderegg, F. O.—Disc. Coarse-ground cement makes more durable concrete (**47-28**) Part 2, Dec. 1951 360–1
Application—Shotcrete (**47-48**) May 1951 709
Arch design
–(**47-29**) Jan. 1951 377
–Plain and reinforced (**47-46**) May 1951 681
–Rib proportions (**47-46**) May 1951 681
–Specifications proposed (**47-46**) May 1951 681
–Thrust and moment (**47-46**) May 1951 681
Are prestressed concrete bridges cheaper? (**47-50**) Stewart Mitchell June 1951 761
–Disc. J. R. Libby and Author, Part 2, Dec. 1951 772–1
Atomic protection—Precast concrete (**47-37**) Mar. 1951 497

B

Bartley, T. R.—Water-solubility of alkalies in portland cement (**47-10**) Oct. 1950 153
Barona de la O, Federico—Alkali-aggregate expansion corrected with portland-slag cement (**47-40**) Mar. 1951 545
Beams—Flexural computations—Code rements (**47-43**) Apr. 1951 589
Beam design—Code requirements (**47-43**) Apr. 1951 589
Bent bars—Code requirements (**47-43**) Apr. 1951 589
Billner, K. P.—New prestressing method utilizes vacuum process (**47-11**) Oct. 1950 161
Blade changes improve tilting mixer (**47-20**) Glenway Maxon Dec. 1950 297
Blanks, R. F.—False set in portland cement (**47-38**) Feb. 1951 517
Bleeding—Concrete (**47-3**) Sept. 1950 36
Bond—Reinforcement for—Code requirements (**47-43**) Apr. 1951 589
Brewer, Harold W.
–Coarse-ground cement makes more durable concrete (**47-25**) Jan. 1951 353
–Entrained air simplifies winter curing (**47-34**) Feb. 1951 449
Bridges
–Prestressed concrete (**47-50**) June 1951 761
–Soniscope test (**47-32**) Feb. 1951 433
Brown, L. S.—Linear traverse technique for measurement of air in hardened concrete (**47-7**) Oct. 1950 117
Bubble spacing factor—Specimens (**47-7**) Oct. 1950 117
Building code—Revision (**47-18**) Dec. 1950 269
Building code requirements for reinforced concrete (ACI 318-51) (**47-43**) Committee 318 Apr. 1951 589
Burmeister, Robert A.—Tests of paper molds for concrete cylinders (**47-2**) Sept. 1950 17
Burrows, Richard W.—Coarse-ground cement makes more durable concrete (**47-25**) Jan. 1951 353
Butyl stearate (**47-3**) Sept. 1950 46

C

Calcium chloride
–Admixture (**47-3**) Sept. 1950 46
–Concrete (**47-34**) Feb. 1951 449
Caldwell, A. G.—New approach to inhibiting alkali-aggregate expansion (**47-47**) May 1951 693
Callan, Edwin J.—Disc. Soniscope tests concrete structures (**47-32**) Part 2, Dec. 1950 444–1
Capillarity—No-fines concrete (**47-55**) June 1951 833
Capitals—Column—Code requirements (**47-43**) Apr. 1951 589
Cellular shells (**LR 47-69**) Jan. 1951 400
Cement
–Air-entraining (**47-3**) Sept. 1950 26
–Coarse-ground—Concrete durability (**47-25**) Jan. 1951 353
–Cooling (**47-54**) June 1951 821
–False set (**47-38**) Feb. 1951 517
–Identification of Gypsum (**47-53**) June 1951 809
–Slag addition (**47-40**) Mar. 1951 545
–Type and brand—(**47-31**) Feb. 1951 417
–Types—New York test road (**47-51**) June 1951 773
–Water-solubility of alkali (**47-10**) Oct. 1950. 153
Chamberlin, Wilbur H.—Entrained air simplifies winter curing (**47-34**) Feb. 1951.. 449
Clemmer, H. F.—Effective sealing of concrete pavement joints (**47-33**) Feb. 1951.... 444
Coarse-ground cement makes more durable concrete (**47-25**)
–Harold W. Brewer and Richard W. Burrows Jan. 1951 353
–Disc. F. O. Anderegg, Bryant Mather, M. Spindel, Hubert Woods and Authors, Part 2, Dec. 1951 360–1
Code requirements—Reinforced concrete (**47-43**) Apr. 1951 589
Column design—(**47-43**) Apr. 1951 589
Columns
–Allowable loading—Code requirements (**47-43**) Apr. 1951 589
–Combination—Code requirements (**47-43**) Apr. 1951 589

–Composite—Code requirements (**47**-43) Apr. 1951 589
–Corner—Design (**LR 47**-75) Mar. 1951 562
–Moment computation—Code requirements (**47**-43) Apr. 1951 589
–Spirally reinforced—Code requirements (**47**-43) Apr. 1951 589
–Stress calculation—Code requirements (**47**-43) Apr. 1951 589
–Tied—Code requirements (**47**-43) Apr. 1951 589

Committee
–212—Mission (**47**-3) Sept. 1950 25
–312 report—Plain and reinforced concrete arches (ACI 312-51) (**47**-46) May 1951 681
–315 report—Proposed revision of manual of standard practice for detailing reinforced concrete structures (**47**-24) Jan. 1951 349
–318 report—Proposed revision of building code requirements for reinforced concrete (ACI 318-47) (**47**-18) Dec. 1950 269
–318 report—Building code requirements for reinforced concrete (ACI 318-51) (**47**-43) Apr. 1951 589
–617 report—Proposed revision of specifications for concrete pavements and bases (ACI 617-44) (**47**-6) Oct. 1950 93
–617 report—Specifications for concrete pavements and bases (ACI 617-51) (**47**-49) May 1951 721
–805 report—Proposed recommended practice for the application of mortar by pneumatic pressure (**47**-12) Nov. 1950 185
–805 report—Recommended practice for the application of mortar by pneumatic pressure (ACI 805-51) (**47**-48) May 1951 709
Compressive strength test—Variables (**LR 47**-80) May 1951 745
Compression reinforcement—Beams (**LR 47**-77) Mar. 1951 565
Compression steel—Flexural members—Code requirements (**47**-43) Apr. 1951 589
Concrete
–Air determination (**47**-7) Oct. 1950 117
–Air-entraining (**47**-3) Sept. 1950 26
–Factors affecting strength (**47**-31) Feb. 1951 417
–Lightweight frame (**LR 47**-67) Nov. 1950 ... 260
–Nomenclature (**LR 47**-68)
Nov. 1950 263
May 1951 752
–Properties in prestressed beam (**47**-21) Dec. 1950 301
Concrete consistency meter (**LR47**-59) Sept. 1950 73
Concrete course (**LR 47**-73) Jan. 1951 403
Concrete products—Admixtures (**47**-3) Sept. 1950 32
Concrete strength variations (**LR 47**-69) May 1951 745
Consistency meters (**LR 47**-59)—Sept. 1950 73
Construction joints—Code requirements (**47**-43) Apr. 1951 589
Construction procedure—New York test road (**47**-51) June 1951 773
Continuous frames—Flat slats designed as—Code requirements (**47**-43) Apr. 1951 .. 589
Cores—Concrete (**47**-31) Feb. 1951 417
Corner columns—Eccentrically loaded (**LR 47**-75) Mar. 1951 562
Corrosion
–Expansive effect (**LR 47**-72) Jan. 1951 ... 402
–Fly ash effect (**LR 47**-60)
Jan. 1951 397
Feb. 1951 481
–Reinforcement (**47**-8) Oct. 1950 125
Cooling materials for mass concrete (**47**-54) H. H. Roberts June 1951 821
Cost
–Membrane curing (**47**-19) Dec. 1950 277
–Prestressed concrete bridges (**47**-50) June 1951 761
–Reinforced concrete (**LR 47**-70) Jan. 1951 .. 400
Cover—Reinforcement (**47**-8) Oct. 1950 125
Cowan, Henry J.—Direct design of T-Beams (**47**-39) Mar. 1951 533
Cracking
–Concrete (**47**-25) Jan. 1951 353
–New York test road (**47**-51) June 1951 773
–Prestressed concrete (**47**-21) Dec. 1950 301
Crane, C. O.—Steam curing protects winter concreting (**47**-14) Nov. 1950 213
Criteria—Tilting mixer (**47**-20) Dec. 1950 ... 297
Crom, J. M.—Disc. Recommended practice for the application of mortar by pneumatic pressure (ACI 805-51) (**47**-48) Part 2, Dec. 1951 720–1
Curing
–(**47**-31) Feb. 1951 417
–Membrane (**47**-19) Dec. 1950 277
–Pavement (**47**-22) Dec. 1950 317
–Pavement specifications (**47**-49) May 1951. 721
–Shotcrete (**47**-12) Nov. 1950 185
–Steam (**47**-14) Nov. 1950 213
Curing concrete pavements with membranes (**47**-19) C. C. Rhodes Dec. 1950 277
Curved beams—Analysis (**47**-15) Nov. 1950. 217

D

Dams
–Lean mass concrete (**47**-41) Mar. 1951 553
–Soniscope test (**47**-32) Feb. 1951 433
Definitions—Reinforced concrete terminology—Code (**47**-43) Apr. 1951 589
Deformed bars
–(**47**-18) Dec. 1950 269
–Spaced and tied (**47**-27) Jan. 1951 365
Design
–Arches (**47**-29) Jan. 1951 377
–Plain and reinforced (**47**-46) May 1951 681
–Atomic shelters (**47**-37) Mar. 1951 497
–Bond and anchorage—Code requirements (**47**-43) Apr. 1951 589
–Circular curved beams (**47**-15) Nov. 1950 ... 217
–Columns—Code requirements (**47**-43) Apr. 1951 589
–Eccentrically loaded corner columns (**LR 47**-75) Mar. 1951 562
–Flat slabs—Code requirements (**47**-43) Apr. 1951 589
–Flexural computations—Code requirements (**47**-43) Apr. 1951 589
–Footings—Code requirements (**47**-43) Apr. 1951 589
–General reinforced concrete—Code requirements (**47**-43) Apr. 1951 589
–Intake structure (**LR 47**-64) Sept. 1950 77
–Paneled ceiling (**LR 46**-37) Sept. 1950 78
–Plastic theory—Skepticism (**LR 47**-66)
Nov. 1950 257
Jan. 1951 398
Mar. 1951 570
May 1951 748
Feb. 1951 485
–Prestressed beams and girders (**LR 47**-76) Mar. 1951 565
–Prestressed concrete (**47**-11) Oct. 1950 161
(**47**-13) Nov. 1950 197
(**47**-36) Feb. 1951 469
–Prestressed concrete bridges (**47**-50) June 1951 761
–Reinforced concrete pavements (**47**-1) Sept. 1950 1
–Roof slab (**47**-30) Jan. 1951 389
–Shear and diagonal tension—Code requirements (**47**-43) Apr. 1951 589
–T-beams (**47**-39) Mar. 1951 533
–Unit buildings (**47**-45) May 1951 669
–Walls—Code requirements (**47**-43) Apr. 1951 589
Design data—Reinforced beams (**LR 47**-77) Mar. 1951 565
Detailing manual—Proposed revision (**47**-24) Jan. 1951 93
Destruction by corrosion (**LR 47**-72) Jan. 1951 402
Deterioration—Floor (**LR 47**-81) May 1951. 747
Determining optimum cross sections for prestressed concrete girders (**47**-13) Fred J. Uziel Nov. 1950 197
Diagonal tension
–Design for—Code requirements (**47**-43) Apr. 1951 589
–Tile-concrete floor joists (**47**-16) Nov. 1950. 229
Direct design of T-beams (**47**-39)
–Henry J. Cowan Mar. 1951 533
–Disc. Robert V. Hauer, L. S. Muller and Author Part 2, Dec. 1951 544–1

Doull, R. M.—Disc. Recommended practice for the application of mortar by pneumatic pressure (ACI 805-51) (**47**-48) Part 2, Dec. 1951 720–1
Durability
–Air-entraining concrete (**47**-3) Sept. 1950 ... 26
(**47**-34) Feb. 1951 449
–Effect of finishing and curing (**47**-22) Dec. 1950 317
–Concrete—Coarse-ground cement (**47**-25) Jan. 1951 353
Dynamic modulus—Apparatus (**47**-4) Sept. 1950 53
Dye—Concrete—Identification of constituents (**47**-25) Jan. 1951 353

E

Economy in reinforced concrete construction (LR 47-70) Jan. 1951 400
Economy through better control of reinforcing steel (**47**-23) F. Tessitor and P. Rosewarne Dec. 1950 333
Effective sealing of concrete pavement joints (**47**-33) H. F. Clemmer Feb. 1951 ... 444
Effects of lateral loads on arches (**47**-29) James P. Michalos Jan. 1951 377
Entrained air
–Mass concrete (**47**-9) Oct. 1950 141
–Winter concrete (**47**-34) Feb. 1951 449
Entrained air simplifies winter curing (**47**-34) Joseph J. Shideler, Harold W. Brewer and Wilbur H. Chamberlin Feb. 1951 449
Embedded conduits—Code requirements (**47**-43) Apr. 1951 589
Equipment
–Prestressed concrete test (**47**-26) Jan. 1951 . 361
–Shotcrete (**47**-48) May 1951 709

F

Factors affecting concrete strength (**47**-31) Walter H. Price Feb. 1951 417
Factors in prestressed girder design (**47**-36)
–M. Fornerod Feb. 1951 469
–Disc. C. C. Zollman and Author Part 2, Dec. 1951 480–1
Failures—Pavement (**47**-1) Sept. 1950 116
False set
–Cement (**47**-53) June 1951 809
–Correction (**47**-38) Feb. 1951 517
False set in portland cement (**47**-38) R. F. Blanks and J. L. Gilliland Feb. 1951 517
Farrant, L. G.—Unit buildings cut construction costs (**47**-45) May 1951 669
Ferguson, Phil M.
–Analysis of three-dimensional beam-and-girder framing (**47**-5) Sept. 1950 51
–Shear resistance of tile-concrete floor joists (**47**-16) Nov. 1950 229
Finishing—Pavement (**47**-22) Dec. 1950 317
Finishing air-entraining concrete pavements (**47**-28) Charles W. Allen Jan. 1951 . 373
Finishing and curing: A key to durable concrete surfaces (**47**-22) Myron A. Swayze Dec. 1950 317
–Disc. T. C. Powers, T. W. Thomas and Author Part 2, Dec. 1951 332–1
Finite differences—Structural problems (**47**-17) Nov. 1950 237
Flexural computations
–Beams—Code requirements (**47**-43) Apr. 1951 589
–Slabs—Code requirements (**47**-43) Apr. 1951 589
Flat slabs
–Design (**47**-45) May 1951 669
–Design—Code requirements (**47**-43) Apr. 1951 589
Floors
–Deterioration (**LR 47**-81) May 1951 747
–Joist construction—Code requirements (**47**-43) Apr. 1951 589
Floor systems—Tile-concrete (**47**-16) Nov. 1950 229
Fly ash and corrosion (LR 47-60)
Sept. 1950 74
Jan. 1951 397
Feb. 1951 481
Footing design—Code requirements (**47**-43) Apr. 1951 589
Footings
–Shear and bond—Code requirements (**47**-43) Apr. 1951 589
–Sloped or stepped—Code requirements (**47**-43) Apr. 1951 589
Forms
–Pavement—specifications (**47**-49) May 1951 721
–Removal (**47**-6) Oct. 1950 93
Form design—Code requirements (**47**-43) Apr. 1951 589
Form removal—Code requirements (**47**-43) Apr. 1951 589
Fornerod, M.—Factors in prestressed girder design (**47**-36) Feb. 1951 469
Foster, Bruce E.
–Use of admixtures in concrete products (**47**-3) Sept. 1950 32
–Use of admixtures as integral waterproofing and dampproofing materials (**47**-3) Sept. 1950 46
Framing
–Atomic shelters (**47**-37) Mar. 1951 497
–Three-dimensional—Analysis (**47**-5) Sept. 1950 61
Freezing and thawing tests—Mass concrete (**47**-9) Oct. 1950 141
Friberg, Bengt F.—Some observations on the use of reinforcing steel in concrete pavements (**47**-1) Sept. 1950 1
Friedland, Rachel—Influence of the quality of mortar and concrete upon corrosion of reinforcement (**47**-8) Oct. 1950 125

G

Gas-forming agents—(**47**-3) Sept. 1950 32
Getting more for our concrete dollar (**47**-30) I. E. Morris Jan. 1951 389
–Addendum by Author Part 2, Dec. 1951 ... 396–1
Gilliland, J. L.
–False set in portland cement (**47**-38) Feb. 1951 517
–Identification of dehydrated gypsum in portland cement (**47**-53) June 1951 809
–Water-solubility of alkalies in portland cement (**47**-10) Oct. 1950 153
Girders—Optimum design (**47**-13) Nov. 1950 197
Goodell, C. E.—Improved sonic apparatus for determining the dynamic modulus of concrete specimens (**47**-4) Sept. 1950 53
Gradation—Sand—Mass concrete (**47**-9) Oct. 1950 141
Green, William C.—Air replaces sand in "no-fines" concrete (**47**-55) June 1951 833
Grip—Prestressing wire (**47**-26) Jan. 1951 361
Group velocity—Concrete test (**47**-32) Feb. 1951 433
Gronquist, C. H.—Disc. Plain and reinforced concrete arches—Report of Committee 312 (**47**-46) Part 2, Dec. 1951 692
Gruenwald, O.—Disc. Plain and reinforced concrete arches—Report of Committee 312 (**47**-46) Part 2, Dec. 1951 692–1
Guide wanted for developing prestressed concrete (LR47-74)
Mar. 1951 561
May 1951 751
Gypsum—Identification in cement (**47**-53) June 1951 809

H

Harry, W. C.—Unit buildings cut construction costs (**47**-45) May 1951 669
Hauer, Robert V.—Disc. Direct design of T-beams (**47**-39) Part 2, Dec. 1951 544–1

Heat balance—Concrete materials (**47-54**) June 1951 821
High-early strength—Pavement specifications (**47-49**) May 1951 721
Hooks—Code requirements (**47-43**) Apr. 1951 589
Hughes, H. Walter—Thin concrete topping restores old pavement (**47-44**) Apr. 1951 653
Hveem, F. N.—Slab warping affects pavement joint performance (**47-52**) June 1951. 797

I

Identification—Reinforcing steel (**47-23**) Dec. 1950 333
Identification of dehydrated gypsum in portland cement (**47-53**) J. L. Gilliland June 1951 809
Influence lines—Arches (**47-29**) Jan. 1951 377
Influence of the quality of mortar and concrete upon corrosion of reinforcement (**47-8**)
–Rachel Friedland Oct. 1950 125
–Disc. Sergey Steuerman and Author Part 2, Dec. 1951 140–1
Inhibitors—Alkali-aggregate reaction (**47-47**) May 1951 693
Inspection—Shotcrete (**47-48**) May 1951 709
Intake structure—Design (**LR 47-64**) Sept. 1950 77
Improved sonic apparatus for determining the dynamic modulus of concrete specimens (**47-4**) C. E. Goodell Sept. 1950 53

J

Jackson, Frank H.
–ACI's place in a billion dollar industry (**47-42**) Apr. 1951 581
–Long-time study of cement performance in concrete—Chapter 7. New York test road (**47-51**) June 1951 773
–Use of admixtures to increase resistance to freezing and thawing, The (**47-3**) Sept. 1950 26
Janney, Jack R.—Simple equipment economically explores prestressing (**47-26**) Jan. 1951 361
Joint fillers—Premolded (**47-6**) Oct. 1950 ... 93
Joint installation—Pavement specifications (**47-49**) May 1951 721
Joints
–Construction—Code requirements (**47-43**) Apr. 1951 589
–Pavement (**47-52**) June 1951 797
–Sealing (**47-33**) Feb. 1951 444
Joist floor construction—Code requirements (**47-43**) Apr. 1951 589
Joists—Tile-concrete (**47-16**) Nov. 1950 229

K

Kennedy, Thomas B.—Proper sand grading improves mass concrete (**47-9**) Oct. 1950 ... 141

L

Laboratory tests of spaced and tied reinforcing bars (**47-27**) William T. Walker Jan. 1951 365
Lateral loads—Arches (**47-29**) Jan. 1951 377
Lean mass concrete used for interior of dams (**47-41**) Byram W. Steele Mar. 1951.. 553
Libby, J. R.—Disc. Are prestressed concrete bridges cheaper? (**47-50**) Part 2, Dec. 1951. 772–1
Lightweight concrete frames (**LR 47-67**) Nov. 1950 260
Linear traverse technique for measurement of air in hardened concrete (**47-7**)
–L. S. Brown and C. U. Pierson Oct. 1950 ... 117
–Disc. T. F. Willis, Katherine Mather and Authors Part 2, Dec. 1951 124–1
Lithium salts—Alkali-aggregate reaction inhibition (**47-47**) May 1951 693
Long-time study of cement performance in concrete—Chapter 7, New York test road (**47-51**)
–F. H. Jackson and I. L. Tyler June 1951 773
–Disc. M. Spindel Part 2, Dec. 1951 796–1

M

Madison, R. E.
–Disc. Use of admixtures as integral waterproofing and dampproofing materials (**47-3**) Part 2, Dec. 1951 52–2
–Disc. Use of admixtures in concrete products (**47-3**) Part 2, Dec. 1951 52–1
Magnel, Gustave—Prototype prestressed beam justifies Walnut Lane bridge design (**47-21**) Dec. 1950 301
Manila—Reinforced concrete practice (**LR 47-71**) Jan. 1951 401
Mass concrete
–Cooling materials (**47-54**) June 1951 821
–Lean (**47-41**) Mar. 1951 553
–Sand grading (**47-9**) Oct. 1950 141
Mass, Marvin L.—Simple equipment economically explores prestressing (**47-26**) Jan. 1951 361
Material proportions—Pavement specifications (**47-49**) May 1951 721
Material quality—Code requirements (**47-43**) Apr. 1951 589
Material storage—Code requirements (**47-43**) Apr. 1951 589
Material testing—Code requirements (**47-43**) Apr. 1951 589
Materials
–New York test road (**47-51**) June 1951 773
–Pavement specifications (**47-49**) May 1951. 721
–Shotcrete (**47-48**) May 1951 709
Mather, Katherine
–Disc. Coarse-ground cement makes more durable concrete (**47-25**) Part 2, Dec. 1951. 360–1
–Disc. Linear traverse technique for measurement of air in hardened concrete (**47-7**) Part 2, Dec. 1951 124–1
Maxon, Glenway—Blade changes improve tilting mixer (**47-20**) Dec. 1950 297
McCoy, W. J.—New approach to inhibiting alkali-aggregate expansion (**47-47**) May 1951 693
Measurement of materials—Pavement specifications (**47-49**) May 1951 721
Melville, Phillip L.—Disc. Standard specifications for concrete pavements and bases (**47-49**) Part 2, Dec. 1951 744–1
Membrane curing—(**47-19**) Dec. 1950 277
Metallic salts—Alkali-aggregate reaction inhibition (**47-47**) May 1951 693
Michalos, James P.—Effects of lateral loads on arches (**47-29**) Jan. 1951 377
Mitchell, Stewart—Are prestressed concrete bridges cheaper? (**47-50**) June 1951 761
Mix proportions
–(**47-31**) Feb. 1951 417
–New York test road (**47-51**) June 1951 773
–No-fines concrete (**47-55**) June 1951 833
Mixer
–Criteria (**LR 47-83**) May 1951 748
–Tilting—Blade changes (**47-20**) Dec. 1950.. 297
Mixing
–Code requirements (**47-43**) Apr. 1951 589
–Pavement specifications (**47-49**) May 1951. 721
Moisture expansion—Pavement slabs (**47-52**) June 1951 797
Molds—Paper (**47-2**) Sept. 1950 17
Moment distribution—Three-dimensional beam-and-girder framing (**47-5**) Sept. 1950. 61
Moran, W. T.
–Admixtures in concrete, Introduction (**47-3**) Sept. 1950 25
–Use of admixtures to counteract alkali-aggregate reaction (**47-3**) Sept. 1950 43

Morris, I. E.
–Getting more for our concrete dollar (**47-30**) Jan. 1951 389
–Addendum (**47-30**) Part 2, Dec. 1951 396–1
Muller, L. S.—Disc. Direct design of T-beams (**47-39**) Part 2, Dec. 1951 544–1

N

New approach to inhibiting alkali-aggregate expansion (**47-47**) W. J. McCoy and A. G. Caldwell May 1951 693
New prestressing method utilizes vacuum process (**47-11**) K. P. Billner Oct. 1950 161
New York test road (**47-51**) June 1951 773
No-fines concrete—Air content—Mix proportions—Properties (**47-55**) June 1951 833
Nomenclature
–Concrete (**LR 47-68**)
Nov. 1950 263
May 1951 752

O

Oil—Miscellaneous—Waterproofing—Workability (**47-3**) Sept. 1950 46
Oleson, C. C.—Disc. Standard specifications for concrete pavements and bases (**47-49**) Part 2, Dec. 1951 744–1
Optimum cross section of prestressed beams (**LR 47-76**) Mar. 1951 565

P

Paneled ceiling—Design (**LR 46-37**) Sept. 1950 78
Paper molds—Tests (**47-2**) Sept. 1950 17
Parking garage—Design (**47-45**) May 1951 669
Parme, Alfred—Solution of difficult structural problems by finite differences (**47-17**) Nov. 1950 237
Particle separation—Concrete (**47-3**) Sept. 1950 36
Pavement
–Design—Failures—Reinforced (**47-1**) Sept. 1950 1
–Finishing (**47-28**) Jan. 1951 373
–Finishing and curing (**47-22**) Dec. 1950 317
–Membrane curing (**47-19**) Dec. 1950 277
–Specifications (**47-49**) May 1951 721
–Thin concrete topping (**47-44**) Apr. 1951 653
Pavement bases—Specifications (**47-49**) May 1951 721
Pavement joints—Sealing (**47-33**) Feb. 1951 444
Pavement reinforcing (**LR 47-78**) Mar. 1951 569
Pavement surveys—Pennsylvania—Rhode Island—Louisiana (**47-1**) Sept. 1950 1
Pierson, C. U.—Linear traverse technique for measurement of air in hardened concrete (**47-7**) Oct. 1950 117
Placing—Code requirements (**47-43**) Apr. 1951 589
Placing and finishing—Pavement specifications (**47-49**) May 1951 721
Plain and reinforced concrete arches (**47-46**)
–Committee 312 May 1951 681
–Disc. O. Gruenwald and R. Kongved, Hubert Rusch, C. H. Gronquist, Anton Tedesko and Committee Part 2, Dec. 1951 692–1
Plant—Aggregate cooling (**47-54**) June 1951 . 821
Plastic flow—Arch design (**47-46**) May 1951 . 681
Plastic theory of design
–Skepticism (**LR 47-66**)
Nov. 1950 257
Jan. 1951 398
Feb. 1951 485
Mar. 1951 570
May 1951 748
Plasticity—Concrete (**47-3**) Sept. 1950 36
Powers, T. C.
–Use of admixtures for the correction of aggregate gradation (**47-3**) Sept. 1950 36
–Disc. Finishing and curing: A key to durable concrete surfaces (**47-22**) Dec. 1950 332–1
Pozzolans—(**47-3**) Sept. 1950 43
Precast concrete
–Atomic protection (**47-37**) Mar. 1951 497
–Beams — Columns — Frames — Retaining walls (**47-35**) Feb. 1951 461
Precast concrete construction in Canada (**47-35**) Otto Safir Feb. 1951 461
Precast concrete offers protection against atomic blast (**47-37**) Arsham Amirikian Mar. 1951 497
President's address—Frank H. Jackson (**47-42**) Apr. 1951 581
Prestressed concrete
–Bridges (**47-50**) June 1951 761
–Design—Beams and girders (**LR 47-76**) Mar. 1951 565
–Vacuum process (**47-11**) Oct. 1950 161
–Development (**LR 47-74**)
Mar. 1951 561
May 1951 751
–Girder design (**47-13**) Nov. 1950 197
–Girder design (**47-36**) Feb. 1951 469
–Test equipment (**47-26**) Jan. 1951 361
–Test of prototype beam (**47-21**) Dec. 1950 . 301
Prestressed concrete ties (**LR 47-65**) Sept. 1950 77
Prestressing—Mechanical (**LR 47-79**) Mar. 1951 570
Price, Walter H.—Factors affecting concrete strength (**47-31**) Feb. 1951 417
Proper sand grading improves mass concrete (**47-9**)—Thomas B. Kennedy Oct. 1950 141
Proportion of materials—Pavement specifications (**47-49**) May 1951 721
Proportions—Mix—Code requirements (**47-43**) Apr. 1951 589
Proposed recommended practice for the application of mortar by pneumatic pressure (**47-12**)—Committee 805 Nov. 1950 185
Proposed revision of building code requirements for reinforced concrete (**ACI 318-47**) (**47-18**)—Committee 318 Dec. 1950 269
Proposed revision of manual of standard practice for detailing reinforced concrete structures (**47-24**)—Committee 315 Jan. 1951 349
Proposed revision of specifications for concrete pavements and bases (**ACI 617-44**) (**47-6**)—Committee 617 Oct. 1950 .. 93
Proteins—Alkali-aggregate reaction inhibition (**47-47**) May 1951 693
Prototype prestressed beam justifies Walnut Lane bridge design (**47-21**)—Gustave Magnel Dec. 1950 301

Q

Quality—Code requirements (**47-43**) Apr. 1951 589

R

Recommended practice for the application of mortar by pneumatic pressure (**ACI 805-51**) (**47-48**)
–Committee 805 May 1951 709
–Disc. J. M. Crom, R. M. Doull and Committee Part 2, Dec. 1951 720–1
Reinforced concrete in Manila (**LR 47-71**) Jan. 1951 401
Reinforced concrete pavement—Design (**47-1**) Sept. 1950 1
Reinforced pavement (**LR 47-78**) Mar. 1951 569

Reinforcing
–Shotcrete (**47**-48) May 1951 709
–Spaced vs. tied (**47**-27) Jan. 1951 365
Reinforcing steel—Identification—Specifications (**47**-23) Dec. 1950 333
Reinforcement
–Anchorage (**47**-18) Dec. 1950 269
–Code requirements (**47**-43) Apr. 1951 589
–Arrangement—Flat slabs—Code requirements (**47**-43) Apr. 1951 589
–Corrosion (**47**-8) Oct. 1950 125
–Placing (**47**-6) Oct. 1950 93
–Placing and handling—Code requirements (**47**-43) Apr. 1951 589
–Protective covering—Code requirements (**47**-43) Apr. 1951 589
–Splicing—Code requirements (**47**-43) Apr. 1951 589
Reinforcement installation—Pavement specifications (**47**-49) May 1951 721
Retaining wall—Precast (**47**-35) Feb. 1951 461
Rhodes, C. C.—Curing concrete pavements with membranes (**47**-19) Dec. 1950 277
Roberts, H. H.—Cooling materials for mass concrete (**47**-54) June 1951 821
Rongved, P.—Disc. Plain and reinforced concrete arches—Committee 312 (**47**-46) Part 2, Dec. 1951 692–1
Roof—Suspended (**LR 47**-67) Nov. 1950 260
Roof slab—Design (**47**-30) Jan. 1951 389
Rosewarne, P.—Economy through better control of reinforcing steel (**47**-23) Dec. 1950 333
Rusch, Hubert—Disc. Plain and reinforced concrete arches—Committee 312 (**47**-46) Part 2, Dec. 1951 692–1
Rust—Reinforcement (**47**-8) Oct. 1950 125

S

Safety factor
–Prestressed concrete (**47**-21) Dec. 1950 301
–(**47**-36) Feb. 1951 469
Safir, Otto—Precast concrete construction in Canada (**47**-35) Feb. 1951 461
Sand—Cooling (**47**-54) June 1951 821
Sand grading—Mass concrete (**47**-9) Oct. 1950 141
Saturation coefficient—No-fines concrete (**47**-55) June 1951 833
Sealing—Pavement concrete—New York test road (**47**-51) June 1951 773
Sealing materials—Pavement joints (**47**-33) Feb. 1951 444
Shear—Design for—Code requirements (**47**-43) Apr. 1951 589
Shear resistance of tile-concrete floor joists (**47**-16) J. Neils Thompson and Phil M. Ferguson Nov. 1950 229
Shells—Concrete—Cellular (**LR 47**-69) Jan. 1951 400
Shotcrete
–(**LR 47**-62) Sept. 1950 76
–Advantages—Definitions—Disadvantages—Recommended practice (**47**-12) Nov. 1950 185
May 1951 (**47**-48) 709
Shideler, Joseph J.—Entrained air simplifies winter curing (**47**-34, Feb. 1951 449
Shrinkage
–Arch design (**47**-46) May 1951 681
–Mass concrete (**47**-9) Oct. 1950 141
–No-fines concrete (**47**-55) June 1951 833
Shrinkage reinforcement—Code requirements (**47**-43) Apr. 1951 589
Simple equipment economically explores prestressing (**47**-26)—Marvin L. Mass and Jack R. Janney Jan. 1951 361
Slab—Roof—Vaulted (**47**-30) Jan. 1951 389
Slab design—Code requirements (**47**-43) Apr. 1951 589
Slabs
–Flexural computations—Code requirements (**47**-43) Apr. 1951 589
–Pavement (**47**-52) June 1951 797
–Prestressed concrete (**47**-11) Oct. 1950 161
–Shearing stress in—Code requirements (**47**-43) Apr. 1951 589
Slab warping affects pavement joint performance (**47**-52)—F. N. Hveem June 1951 797
Slag—Addition to cement (**47**-40) Mar. 1951 . 545
Soaps—(**47**-3) Sept. 1950 46
Solution of difficult structural problems by finite differences (**47**-17) Alfred Parme Nov. 1950 237
Some observations on the use of reinforcing steel in concrete pavements (**47**-1) Bengt F. Friberg Sept. 1950 1
Sonic apparatus—Calibration—Operation—Wiring diagram (**47**-4) Sept. 1950 53
Sonic method—Dynamic modulus (**47**-4) Sept. 1950 53
Soniscope tests concrete structures (**47**-32) E. A. Whitehurst Feb. 1951 433
–Disc. Edwin J., Callan and Author Part 2, Dec. 1951 444–1
Spindel, M.
–Disc. Coarse-ground cement makes more durable concrete (**47**-25) Part 2, Dec. 1951. 360–1
–Disc. Long-time study of cement performance in concrete—Chapter 7. New York test road (**47**-51) Part 2, Dec. 1951 796–1
Specifications—Reinforcing steel (**47**-23) Dec. 1950 333
Specifications for concrete pavements and bases (ACI 617-51) (**47**-49) Committee 617 May 1951 721
–Disc. Phillip L. Melville, C. C. Oleson and Committee Part 2, Dec. 1951 744–1
Steam curing—Mass concrete (**47**-14) Nov. 1950 213
Steam curing protects winter concreting (**47**-14) C. O. Crane Nov. 1950 213
Steel—Reinforcing (**47**-1) Sept. 1950 1
Steele, Byram W.—Lean mass concrete used for interior of dams (**47**-41) Mar. 1951 . 553
Steuerman, Sergey—Disc. Influence of the quality of mortar and concrete upon corrosion of reinforcement (**47**-8) Part 2, Dec. 1951 140–1
Stirrups—Code requirements (**47**-43) Apr. 1951 589
Strain gage—Arrangement in prestressed beam (**47**-21) Dec. 1950 301
Strength
–Air-entraining concrete (**47**-3) Sept. 1950 ... 26
–(**47**-34) Feb. 1951 449
–Concrete—Factors (**LR 47**-80) May 1951 .. 745
–Factors affecting (**47**-31) Feb. 1951 417
–No-fines concrete (**47**-55) June 1951 833
Stresses
–Allowable in concrete (**47**-18) Dec. 1950 269
–Concrete allowable—Code requirements (**47**-43) Apr. 1951 589
–Steel allowable—Code requirements (**47**-43) Apr. 1951 589
Structural problems—Solution by finite differences (**47**-17) Nov. 1950 237
Subgrade preparation
–(**47**-6) Oct. 1950 93
–Pavement specifications (**47**-49) May 1951 . 721
Surface preparation—Shotcreting (**47**-48) May 1951 709
Swayze, Myron A.—Finishing and curing: A key to durable concrete surfaces (**47**-22) Dec. 1950 317

T

Tanks—Prestressed concrete (**47**-11) Oct. 1950 161
T-beams—Design (**47**-39) Mar. 1951 533
Teaching plain concrete (**LR 47**-73) Jan. 1951 403
Tedesko, Anton—Disc. Plain and reinforced concrete arches—Committee 312 (**47**-46) Part 2, Dec. 1951 692–1
Temperature—Code requirements (**47**-43) Apr. 1951 589
Temperature changes—Arch construction (**47**-46) May 1951 681
Temperature differential—Concrete slab (**47**-19) Dec. 1950 277

Tessitor, F.—Economy through better control of reinforcing steel (47-23) Dec. 1950... 333
Test procedure—New York test road (47-51) June 1951... 773
Test specimens—Dimensions (47-31) Feb. 1951... 417
Tests of paper molds for concrete cylinders (47-2) Robert A. Burmeister Sept. 1950... 17
Thermal expansion—Pavement slabs (47-52) June 1951... 797
Thickness required—Pavement specifications (47-49) May 1951... 721
Thin concrete topping restores old pavement (47-44) H. Walter Hughes Apr. 1951. 653
Thomas, T. W.—Disc. Finishing and curing: A key to durable concrete surfaces (47-22) Part 2, Dec. 1951... 332-1
Thompson, J. Neils—Shear resistance of tile-concrete floor joists (47-16) Nov. 1950. 229
Three-dimensional framing—Analysis—Moment distribution—Torsional stiffness (47-5) Sept. 1950... 61
Ties—Railroad—Prestressed concrete (LR 47-65) Sept. 1950... 77
Tile-concrete floor joists (47-16) Nov. 1950 229
Topping—Thin concrete (47-44) Apr. 1951. 653
Torsion—Curved beams (47-15) Nov. 1950.. 217
Tyler, I. L.—Long-time study of cement performance in concrete—Chapter 7. New York test road (47-51) June 1951... 773

U

Unit buildings cut construction costs (47-45) L. G. Farrant and W. C. Harry May 1951... 669
Use of admixtures as integral waterproofing and dampproofing materials (47-3) Bruce E. Foster Sept. 1950... 46
–Disc. R. E. Madison and Author Part 2, Dec. 1951... 52-2
Use of admixtures in concrete products (47-3) Bruce E. Foster Sept. 1950... 32
–Disc. R. E. Madison and Author Part 2, Dec. 1951... 52-3
Use of admixtures for the correction of aggregate gradation (47-3) T. C. Powers Sept. 1950... 36
Use of admixtures to counteract alkali-aggregate reaction (47-3) W. T. Moran Sept. 1950... 43
Use of admixtures to increase resistance to freezing and thawing, The (47-3) Frank H. Jackson Sept. 1950... 26
–Disc. M. Spindel Part 2, Dec. 1951... 52-1
Uziel, Fred J.—Determining optimum cross sections for prestressed concrete girders (47-13) Nov. 1950... 197

V

Vacuum process—Prestressing (47-11) Oct. 1950... 161
Valore, Rudolph C., Jr.—Air replaces sand in "no-fines" concrete (47-55) June 1951... 833
Velutini, Becla—Analysis of continuous circular curved beams (47-15) Nov. 1950... 217

W

Walker, William T.—Laboratory tests of spaced and tied reinforcing bars (47-27) Jan. 1951... 365
Walls—Design of reinforced—Code requirements (47-43) Apr. 1951... 589
Walnut Lane bridge—Test of prototype beam (47-21) Dec. 1950... 301
Warping
–Concrete slab—Effect of curing (47-19) Dec. 1950... 277
–Pavement slabs (47-52) June 1951... 797
Water-cement ratio—Corrosion of reinforcement (47-8) Oct. 1950... 125
Water curing—Pavement—Timing (47-22) Dec. 1950... 317
Water repellents—Butyl stearate—Soaps (47-3) Sept. 1950... 46
Water-repelling agents (47-3) Sept. 1950... 32
Water-solubility of alkalies in portland cement (47-10) J. L. Gilliland and T. R. Bartley Oct. 1950... 153
Web reinforcement—Code requirements (47-43) Apr. 1951... 589
Whitehurst, E. A.—Soniscope tests concrete structures (47-32) Feb. 1951... 433
Willis, T. F.—Disc. Linear traverse technique for measurement of air in hardened concrete (47-7) Part 2, Dec. 1951... 124-1
Wind stress—Columns—Code requirements (47-43) Apr. 1951... 589
Winter concreting—Steam curing (47-14) Nov. 1950... 213
Winter curing—Air-entraining concrete (47-34) Feb. 1951... 449
Woods, Hubert—Disc. Coarse-ground cement make more durable concrete (47-25) Part 2, Dec. 1951... 360-1
Workability agents (47-3) Sept. 1950... 32
Workmen—Qualifications—Duties (47-48) May 1951... 709

Z

Zollman, Charles C.—Disc. Factors in prestressed girder design (47-36) Part 2, Dec. 1951... 480-1

INDEX

Current Reviews

From Journal of American Concrete Institute, V. 22, Sept. 1950 to June 1951

A

ABC of Concrete, The. Hummel. Wilhelm Ernst & Sohn 754
About driving on concrete roads. Boesgaard. *Beton-Teknik* 577
Accelerators—Concrete products. Thuilleaux. *Revue des Materiaux* 177
Accelerators — Insulating slabs. Thuilleaux. *Revue des Materiaux* 270
Aerated concrete—Part I. *Digest, Building Research Station* 850
Aggregates—Cooling. Lenhart. *Rock Products* 493
Aggregate—Density—Measurement. Destable. *Annales de L'Institut Technique du Batiment et des Travaux Publics* 754
Aggregate — Lightweight. *Building Industry Distributors Course B* 265
Aggregate—Mass concrete—Production. Lenhart. *Rock Products* 665
Aggregate—Preparation. Pochin. *Reinforced Concrete Review* 573
Aggregates — Thermal expansion. Callan. *Bulletin, Waterways Experiment Station* 342
Air—Determination. Craven. *Commonwealth Engineer* 575
Air-entraining agents. Vierheller. *Zement-Kalk-Gips* 755
Alkali-aggregate reaction—Correction. *Special Technical Publication, ASTM* 342
Alkali-aggregate reactions—Slag cement effect. Cox, Coleman and White. *Pit and Quarry* 850
Analysis and load tests of a long-span diagonally ribbed floor. Soutter. *Bulletin Technique de la Suisse Romande* 665
Analysis of blast furnace slag in cements. Brocard. *Revue des Materiaux* 662
Analysis of cylindrical tubes of variable thickness subjected to circular bending. Paschoud. *Bulletin Technique de la Suisse Romande* 756
Analysis of truncated elliptical shells. Chambaud. *Annales de L'Institut Technique du Batiment et des Travaux Publics, Manuel du Beton Arme* 84
Analysis of Vierendeel trusses. Pascale. *Giornale del Genio Civile* 81
Angle-web construction method, The. Oestreicher. *Betonstein-Zeitung* 410
Application of new techniques to the solution of an efflorescence problem. Brownell. *Journal of the American Ceramic Society* 576
Application of prestressing to shell roof construction, The. Cousins. *Reinforced Concrete Review* 575
Aqueous cementitious systems containing lime and alumina. Steinour. *Bulletin, Portland Cement Assn.* 852
Arch—Corrugated. Waller. *Civil Engineering and Public Works Review* 406
Arch—Design. Beaufoy and Diwan. *Concrete and Constructional Engineering* 661
Arch — Test — Expansive cement. Rinaldi. *Giornale del Genio Civile* 406
Arch bridges—Design. Priolo. *Giornale del Genio Civile* 489
Arch bridges — Rapid calculation. Priolo. *Giornale del Genio Civile* 405
Arches—Tied. Hruban. *Concrete and Constructional Engineering* 83
Arches—Ultimate span. Brendel. *Beton-u. Stahlbetonbau* 83
Architectural design in reinforced concrete and its pioneers. Tvede. *Beton-Teknik* 405
Are our buildings rationally designed? Plum. *Ingenioren* 413

B

Bag—Cement—Opener. Slayter, Godfrey and Heffernan. *Journal of the Institute of Engineers Australia* 345
Bamboo — Reinforcing. Mehra, Uppal and Chadda. *Indian Concrete Journal* 853
Bamboo reinforcement in portland cement concrete. Glenn. *Bulletin, Clemson Agricultural College* 664
Barium cement—Properties. Bronski. *Cement and Lime Manufacture* 266
Basic Reinforced Concrete Design. Large. Ronald Press Co. 180
Batching—Lightweight concrete. Graf. *Cement.* 344
Beams—Compression reinforcement. Johnson. *Betong* 88
Beams—Continuous. *Die Bautechnik* 265
Beams—Continuous—Composite. Guerin and Pigeau. *Annales de L'Institut Technique du Batiment et des Travaux Publics* 755
Beams—Continuous—Influence lines. Castiglia. *Giornale del Genio Civile* 81
Beams—Deep—Failure. Nylander and Holst. *Transactions of the Swedish Royal Technical University* 410
Beams—Design. Camiz. *Giornale del Genio Civile* 490
Beams—Design. Johnson. *Betong* 494
Beams—Stresses. Torrojo. *Instituto Tecnico de la Construccion* 851
Beams—Torsional strength. Cowan. *Magazine of Concrete Research* 575
Beams—Ultimate design. Cowan. *Civil Engineering and Public Works Review* 755
Bending—Failure. Chambaud. *International Assn. of Bridge and Structural Engineering* 406
Bending stiffness—Slabs. Nylander. *Betong* 91
Bibliographic review of agents and causes of concrete corrosion. Nicol. *Revue des Materiaux* 82
Bibliography on management of construction jobs. *The Engineering Societies Library* 577
Binders — Hydraulic — Measurement. Rey. *Revue des Materiaux* 574
Binders — Plaster — Cement. Chassevent and Domine. *Revue des Materiaux* 573
Blocks—Curing. Shore. *Rock Products* 758
Bond stress—Distribution. Wilkins. *Magazine of Concrete Research* 853
Boundary problems of cylindrical shells. Hruban. *Transactions of the Dr. E. Benes' Technical University* 753
Bricklaying—II. Rau. Delmar Publishers, Inc. 753
Bridge—Construction. Legrand and Houdin. *Annales de L'Institut Technique du Batiment et des Travaux Publics* 575
Bridge—Hollow section. Morandi. *Giornale del Genio Civile* 341
Bridge—Prestressed concrete. Riessauw, Dooms, Van Cauwenberge and Vandepitte. *Annales des Travaux Publics de Belgique* 180
Bridge—Prestressed concrete. Dehan and Louis. *Annales des Travaux Publics de Belgique* 183
Bridge—Prestressed concrete. Storrer. *Annales des Travaux Publics de Belgique* 183, 267
Bridge — Prestressed concrete. Dischinger. *Beton-u. Stahlbetonbau* 576
Bridge—Prestressed concrete. *Concrete and Constructional Engineering* 661
Bridge—Re-erection. Meiners. *Beton-u. Stahlbetonbau* 491
Bridge—Rigid frame. Hayden and Barron 415

Bridges—Prestressed concrete. *La Technique des Travaux* 87
Bridges—Prestressed concrete. Starink. *Cement*. 343
Bridges — Sando — Kockestrand. De Cuyper. *Annales des Travaux Publics de Belgique* 344
Bridges—Skew slab—Study. Gossard, Siess, Newmark and Goodman. *University of Illinois Engineering Experiment Station Bulletin* 82
Building—Concrete. Schelling. *De Ingenieur*.... 413
Building industry—Weather. *Building Research Advisory Board* 82
Buildings of fabric-like reinforced concrete. Samsondi-Kiss and Farkas. *Epites-Epiteszet*... 757

C

Caissons — Reinforced concrete. *Reinforced Concrete Review* 184
Caissons as dam foundations. Fergusson. *Civil Engineering and Public Works Review*..... 406
Calcite in concrete. Storm, Fiskaa and Stromme. *Teknisk Ukeblad*..... 666
Calcium chloride—Concrete. Thuilleaux. *La Technique Moderne-Construction*..... 179
Calcium sulfoaluminate—Stability. Lafuma and Brocard. *Centre d'Etudes et de Recherches de l'Industries des Liants Hydrauliques*..... 84
Calculated windforce in structural design, The. Woeber. *Zeitschrift des Oesterreichischen Ing. und Arch. Vereines*..... 342
Cement—Ferric. Ferrari. *Il Cemento*..... 411
Cement—Fineness—Strength effect. Gruender and Tabbah. *Zement-Kalk-Gips*..... 759
Cement—Heat of hydration. Newman. *Journal of Research*..... 491
Cement—Properties. Czernin. *Zement-Kalk-Gips*..... 756
Cement—Rotary grinding. Pralle. *Zement-Kalk-Gips*..... 85
Cement—Setting time—Determination. Glantz and Halsted. *ASTM Bulletin*..... 490
Cement—Sulfate susceptibility test. Taylor and Bogue. *Journal of Research*..... 407
Cement clinker seen in a microscope under reflected light. Lhopitallier and James. *Revue des Materiaux*..... 577
Cement grouting. Bayley. *Commonwealth Engineer*..... 177
Cements—Barium—Strontium. Bronski. *Cement and Lime Manufacture*..... 266
Cements with reduced alkalinity. Ferrari. *Revue des Materiaux*..... 851
Chemical attack—Concrete. Kleinlogel..... 266
Chemical deterioration of concrete. Rutle. *Teknisk Ukeblad*..... 407
Civil engineering handbook. Urquhart. McGraw-Hill Book Co..... 493
Clinker—Quenching. Uhlig. *Zement-Kalk-Gips*.. 81
Code—British. Scott, Glanville and Thomas..... 574
Code—Italian. Gallareto. *Giornale del Genio Civile*..... 182
Color and texture in concrete surfaces. Wilson. *Reinforced Concrete Review*..... 574
Columns—Long—Capacity. Hruban. *Transactions of the Dr. E. Benes' Technical University*.. 754
Combined stresses in a continuous beam with a linear variable load. Cattin. *Giornale del Genio Civile*..... 177
Combined use of pre-tensioning and post-tensioning methods. Lazarides. *Magazine of Concrete Research*..... 852
Comparative study of an overdeterminate frame through different methods used in models. Assinaire. *Cahiers du Centre Scientifique et Technique du Batiment*..... 408
Composite concrete and steel construction for continuous beams. Guerin and Pigeau. *Annales de L'Institut Technique du Batiment et des Travaux Publics, Theories and Methods of Design* 755
Composite construction — Bridges. Rinaldi. *Giornale del Genio Civile*..... 177
Concrete—German. Bornemann. *Beton-u. Stahlbetonbau*..... 411
Concrete beams with compression reinforcement. Johnson. *Betong*..... 88
Concrete construction in the Tyne tunnels. *Concrete and Constructional Engineering*..... 663
Concrete fences. Pennington. Concrete Publications, Ltd..... 341
Concrete liquifiers and air-entraining agents. Vierheller. *Zement-Kalk-Gips*..... 755
Concrete pavements. Kanstein. *Cement*..... 759
Concrete products — Manufacture. Levy. *Revue des Materiaux*..... 574
Concrete quality control—Fallacious application of statistical analysis. Mercer. *Commonwealth Engineer*..... 754
Concrete roads viewed technically and economically. Ellert. *Beton-Teknik*..... 578
Concrete ship repair slipways at Newcastle. Floyd and Butcher. *Commonwealth Engineer*..... 757
Concrete slabs reinforced in two directions. Nylander. *Betong*..... 91
Concrete specifications in various countries. Themmer. *Cement och Betong*..... 414
Concrete statue. Carasso. *Cement*..... 410
Conjugate frame as a tool for evaluating deflections. Murphy. *Proceedings, 7th International Congress of Applied Mechanics*..... 406
Considerations in testing floor construction. Gaede. *Betonstein-Zeitung*..... 574
Construction — Costs — Precasting — Prestressing. Rusch. *Betong*..... 668
Construction of a natural draft cooling tower at Portarlington. *Bulletin, The Institute of Civil Engineers of Ireland*..... 757
Construction of aircraft hangars in prestressed concrete at the Melsbroeck Airfield near Brussels, The. Duyster. *Bulletin, Cement and Concrete Assn*..... 178
Construction of Clark Dam on the Derwent River, Butler's Gorge, Tasmania, The. Slayter, Godfrey, and Heffernan. *Journal of the Institute of Engineers Australia*..... 345
Construction of the Conflans bridge. Legrand and Houdin. *Annales de L'Institut Technique du Batiment et des Travaux Publics*..... 575
Continuous Beams — Combined prestressing. Lazarides. *Magazine of Concrete Research*..... 852
Continuous beams—Combined stresses. Cattin. *Giornale del Genio Civile*..... 177
Continuous beams—Design. *Die Bautechnik*..... 265
Continuous beams—Influence lines. Castiglia. *Giornale del Genio Civile*..... 81
Continuous beams — Influence lines. Anger. Wilhelm Ernst & Sohn..... 412
Continuous beams — Prestressing. Raineri. *Giornale del Genio Civile*..... 341
Continuous bridge in prestressed concrete, A. *Reinforced Concrete Review*..... 405
Continuous prestressed concrete girder bridge in France, A. *Concrete and Constructional Engineering*..... 661
Continuous structures—Design. Beaufoy and Diwan. *Concrete and Constructional Engineering* 661
Control of granulated slags used in cement manufacture. Blondiau. *Revue des Materiaux*..... 851
Cooling—Dam concrete. Fujita. *Journal of the Japan Society of Civil Engineers*..... 177
Cooling aggregates and cement for Detroit Dam. Lenhart. *Rock Products*..... 493
Cooling tower—Construction. *Bulletin, The Institution of Civil Engineers of Ireland*..... 757
Corrosion—Concrete. Nicol. *Revue des Materiaux* 82
Corrugated concrete arch—Part 2, The. Waller. *Civil Engineering and Public Works Review*..... 406
Cracks in concrete due to properties of cement. Czernin. *Zement-Kalk-Gips*..... 756
Creep—Concrete. *Deutscher Beton Verein*..... 494
Creep—Prismatic solids. Levi. *Giornale del Genio Civile*..... 81
Curing—Essentials. Shore. *Rock Products*..... 758
Curing—Lightweight concrete. Graf. *Cement*.... 344
Curved structures—Design. Paron and Michalos. *Proceedings, ASCE*..... 662
Cylindrical shells of reinforced concrete, Part I. Hruban. *Transactions of the Dr. E. Benes' Technical University*..... 574

D

Dam—Arch—Design. Jaeger. *Civil Engineering and Public Works Review*..... 758
Dam—Arch—Watertightness—Internal stresses. Ehrmann. *La Technique Moderne-Construction*. 86
Dam — Arch-gravity — Construction. Slayter, Godfrey, and Heffernan. *Journal of the Institute of Engineers Australia*..... 345

Dam construction—Evolution—Italy. Marcello. *La Technique Moderne-Construction* 86
Dam foundations—Caissons. Fergusson. *Civil Engineering and Public Works Review* 406
Dampproofers—Test. Spurgeon. *ASTM Bulletin* 577
Dams—Hydro-electric. *Concrete and Constructional Engineering* 668
Dams—Triangular section—Selection. Sarkaria. *Civil Engineering and Public Works Review* 753
Deflections—Conjugate frame. Murphy. *Proceedings, 7th International Congress of Applied Mechanics* 406
Deformation—Determination. Berthier. *Revue des Materiaux* 490
Depot—Reinforced concrete. Gasc. *La Technique Moderne-Construction* 88
Design—Arch bridges. Priolo. *Giornale del Genio Civile* 405, 489
Design — Architectural — Reinforced concrete. Tvede. *Beton-Teknik* 405
Design—Beams. Camiz. *Giornale del Genio Civile* 490
Design—Beams. Johnson. *Betong* 494
Design—Beams. Cowan. *Magazine of Concrete Research* 575
Design—Beams. Cowan. *Civil Engineering and Public Works Review* 755
Design—Beams. Torrojo. *Instituto Tecnico de la Construccion* 851
Design—Beams—Walls. Nylander and Holts. *Transactions of the Royal Technical University* ... 410
Design—Continuous beams. Anger 412
Design—Curved tanks. Belluzzo. *Giornale del Genio Civile* 405
Design—Flat plate. Pozzati. *Giornale del Genio Civile* 661
Design—Flat slabs. Gallareto. *Giornale del Genio Civile* 182
Design—Flexural members. Vawter and Clark. .. 579
Design—Girders. Herzka 495
Design—Materials. Freudenthal 853
Design—Nomograms. Heman. *Cement* 580
Design — Overdeterminate frames. Assinaire. *Cahiers du Centre Scientifique et Technique du Batiment* 408
Design—Plates—Shells. Girkmann 496
Design—Ports. Strongoli. *Giornale del Genio Civile* 82
Design—Prestressed concrete. Riessauw, Dooms, Van Cauwenberge and Vandepitte. *Annales des Travaux Publics de Belgique* 180
Design—Prestressed concrete. Rusch. *Beton-u. Stahlbetonbau* 492
Design—Prestressed concrete. *Beton-u Stahlbetonbau* 492
Design—Rational. Plum. *Ingenioren* 413
Design—Rectangular slabs. Pozzati. *Giornale del Genio Civile* 407
Design—Reinforced concrete. Large. 180
Design—Reinforced concrete. Kloucek. 268
Design—Reinforced concrete. Saliger. 267
Design—Reinforced concrete. Saliger. 343
Design — Reinforced concrete — Prestressed concrete. *Deutscher Beton-Verein* 494
Design—Rigid frame. Grossi. *Giornale del Genio Civile* 82
Design—Rigid frame. Dall'Aglio. *Giornale del Genio Civile* 490
Design — Rigid frame. Zerner. *Beton-u Stahlbetonbau* 576
Design—Rigid frame bridge. Hayden and Barron 415
Design—Rigid frames—Precast. Munz. *La Technique Moderne-Construction* 408
Design—Shell roofs. Silvera. *Magazine of Concrete Research* 580
Design—Shell roof—Plastic theory. Baker. *Magazine of Concrete Research* 575
Design—Skew structures. Weiner. *Proceedings ASCE* 409
Design—Skewed rigid frames. Bower. *Proceedings ASCE* 341
Design—Slabs. Sefton. *Civil Engineering and Public Works Review* 406
Design—Structures. Stador 266
Design—Structures. Paris 492
Design—Trusses. Eymar. *Instituto de la Construccion y del Cemento* 851
Design — Ultimate theory. *Czechoslovakian Society for Regulations* 181
Design—Vierendeel trusses. Pascale. *Giornale del Genio Civile* 81
Design—Windforce. Woeber. *Zeitschrift des Oesterreichischen Ing. und Arch. Vereines* 342
Design and calculation of flat slab floors. Haas. Martinus Nijhoff 265
Design and test of helicoid structures. Baldacci. *Giornale del Genio Civile* 576
Design curves for footings on soil. McCracken. *Proceedings ASCE* 412
Design of concrete structures. *Czechoslovakian Society for Regulations* 181
Design of continuous beams, The. Lamberg. *Die Bautechnik* 265
Design of prestressed tanks. Crom. *Proceedings ASCE* 407
Design of prismatic structures. Ashdown. Concrete Publications Ltd. 849
Design of rectangular and triangular reinforced concrete ribbed plates. Danusso. *Il Cemento* .. 489
Design of reinforced concrete hyperboloidal tanks. Favini. *Giornale del Genio Civile* 178
Deterioration — Chemical. Rutle. *Teknisk Ukebiad* 407
Deterioration of concrete in the Herserud Lift. Hanson and Rosenstrom. *Betong* 662
Determination of modulus of elasticity of rocks on site. Habib. *Annales de L'Institut Technique du Batiment et des Travaux Publics* 408
Determination of stresses in simple and trussed beams. Torrojo. *Instituto Tecnico de la Construccion* 851
Development of a device for prestressing reinforced concrete structures. Morandi. *Giornale del Genio Civile* 667
Development work at the field test unit. *Magazine of Concrete Research* 573
Diatomite—Pozzolans. *Special Technical Publication ASTM* 342
Distribution of concrete stress in reinforced and prestressed concrete beams when tested to destruction by a pure bending moment. Prentis. *Magazine of Concrete Research* 850
Distribution of Deformation. Kloucek. Orbis 268
Domes — Analysis. Chambaud. *Annales de L'Institut Technique du Batiment et des Travaux Publics* 84
Domes—Skin stresses. Zanaboni. *Giornale del Genio Civile* 178
Drainage—Porous pipe. Hamer. *Cement* 83
Durability—Concrete. Callan. *Bulletin, Waterways Experiment Station* 342
Durability—Concrete pavement. *Report, Michigan State Highway Dept.* 346
Dynamic testing of concrete. Chefdeville and Dawance. *Annales de L'Institut Technique du Batiment et des Travaux Publics* 181

E

Economy—Public construction. *Civil Engineering* 90
Effect of blast-furnace slag cement on alkali-aggregate reaction in concrete. Cox, Coleman and White. *Pit and Quarry* 850
Effect of calcium chloride on concrete, The. Thuilleaux. *La Technique Moderne-Construction* 179
Effect of regarding agents on redundant prismatic solids, The. Levi. *Giornale del Genio Civile* ... 81
Effect of skew angle on rigid-frame reactions. Bower. *Proceedings ASCE* 341
Efflorescence—Correction. Brownell. *Journal of the American Ceramic Society* 576
Elastic theory for the torsional strength of rectangular reinforced concrete beams, An. Cowan. *Magazine of Concrete Research* 575
Electrical treatment of concrete in cold weather. Haller. *Civil Engineering and Public Works Review* 756
Elementary Stress Analysis. Soneson. Pitman Publishing Co. 267
Elementary theory and design of flexural members. Vawter and Clark. John Wiley & Sons, Inc. .. 579
Elliptical shells. Chambaud. *Annales de L'Institut du Batiment Technique et des Travaux Publics* 84
Engineering method. Fish. Stanford University Press 753
Equivalent elastic systems in the analysis of continuous structures—II. Beaufoy and Diwan. *Concrete and Constructional Engineering* 661

Essential factors for adequate curing. Shore. *Rock Products* ... 758
European concrete practice. *Reinforced Concrete Review* ... 184
Evolution of dam construction in Italy. Marcello. *La Technique Moderne-Construction* ... 86
Exact results by moment distribution analysis. Le Nobel. *De Ingenieur* ... 495
Expansion — Correction — Pozzolans. *Special Technical Publication ASTM* ... 342
Expansive cement—Arch construction. Rinaldi. *Giornale del Genio Civile* ... 406
Experiences and techniques for waterproofing underground structures. Poirson. *Annales de L'Institut Technique du Batiment et des Travaux Publics* ... 576
Experimental analysis of structures by means of bar models with one and two degrees of freedom. Ricaldoni. *Bulletin, Instituto de Estatica, Uraguay* ... 850
Experimental investigation on failure in reinforced concrete units under bending. Chambaud. *Final Report, International Assn. of Bridge and Structural Engineering* ... 406
Explanatory handbook on the British Standard Code of Practice for Reinforced Concrete. Scott, Glanville and Thomas. Concrete Publications Ltd. 574

F

Facts about some old Danish concrete roads. *Beton-Teknik* ... 573
Failure—Concrete units. Chambaud. *Final Report, International Assn. of Bridge and Structural Engineering* ... 406
Failure—Deep beams and walls. Nylander and Holst. *Transactions of the Royal Technical University* ... 410
Faltwerke—Design. Girkmann ... 496
Fences—Concrete. Pennington ... 341
Fifty years of concrete and reinforced concrete in Germany. Bornemann. *Beton-u. Stahlbetonbau* 411
Fire—Concrete. Nicol. *Revue des Materiaux* ... 82
First general assembly of the International Building Information Council. *Cahier, Centre Scientifique et Technique du Batiment* ... 850
Flame-photometer determination of sodium and potassium in soils and other siliceous materials. Halstead and Chaiken. *Public Roads* ... 410
Flat plates—Design. Pozzati. *Giornale del Genio Civile* ... 661
Flat slabs and methods of design. Gallareto. *Giornale del Genio Civile* ... 182
Flat slab floors—Design. Haas ... 265
Flat slab floors without capitals. Balency-Bearn, Devars du Mayne, Turin, Hahn and Chefdeville. *Annales de L'Institut Technique du Batiment et des Travaux Publics* ... 758
Flexural members—Design. Vawter and Clark ... 579
Floor joists—Prestressed concrete. Masterman. *Civil Engineering and Public Works Review* ... 754
Floors — Pigments — Wearing course. *Digest, Building Research Station* ... 489
Floors—Precast elements. Amos and Bochmann. *Deutsches Ausschuss Stahlbeton* ... 83
Floors—Testing. Gaede. *Beionstein-Zeitung* ... 574
Fly Ash—Structural use. Korth. *Bauplannung Bautechnik* ... 88
Foam concrete. *Betonstein-Zeitung* ... 411
Foamed slag. *Building Industry Distributors Course B* ... 265
Footings—Design curves. McCracken. *Proceedings ASCE* ... 412
Forms—Reinforced slabs. Nielsen. *Bulletin, Swedish Cement and Concrete Research Institute* 178
Foundation—Rectangular slab. Halbritter. *Die Bautechnik* ... 82
Foundations for structures storing high temperature fuels. Lamparelli. *Il Cemento* ... 489
Frames—Steel saving. Hruban and Svab. *Transactions of the Dr. E. Benes' Technical University* ... 753
Freezing—Concrete. Nicol. *Revue des Materiaux* 82
Freyssinet—Prestressing system. Weinberg. *La Technique Moderne-Construction* ... 182
Fundamental principles for the analysis of plane-linear structures. Torrojo. *Instituto Tecnico de la Construccion* ... 851

G

Gas concrete and erection method by the Hebel system. *Betonstein-Zeitung* ... 411
German prestressed concrete railroad ties. Meier. *Publication, Instituto Tecnico de la Construccion y del Cemento* ... 578
Girder — Continuous — Prestressed concrete. Magnel. *Science et Technique* ... 89
Girders—Design. Herzka ... 495
Granite — Thermal and moisture expansion. Hockman and Kessler. *Journal of Research* ... 84
Granolithic concrete floors. *Digest, Building Research Station* ... 489
Grouting. Bayley. *Commonwealth Engineer* ... 177

H

Handbook of chemistry and physics. Chemical Rubber Publishing Co. ... 578
Handbook of experimental stress analysis. Hetenyi. Chapman and Hall ... 415
Hangars — Construction. Duyster. *Bulletin, Cement and Concrete Assn.* ... 178
Harbor reconstruction for the port of the Canal of Terracina. Strongoli. *Giornale del Genio Civile* 82
Hardening — Mortar — Pozzolans. Parissi. *Giornale del Genio Civile* ... 341
Hardening process of lime mortar, The. Alberti. *Zement-Kalk-Gips* ... 179
Hardy Cross moment distribution method. *Giornale del Genio Civile* ... 82
Heat—Setting concrete. Haller. *Civil Engineering and Public Works Review* ... 756
Heat and sound insulation of reinforced concrete buildings. Glover. *Reinforced Concrete Review* 405
Heat insulation of flat concrete roofs. Ramboell. *Beton og Jernbeton* ... 493
Heat of hydration — Cement — Determination. Newman. *Journal of Research* ... 491
Hebel system—Gas concrete. *Betonstein-Zeitung* 411
Helicoid structures—Design. Baldacci. *Giornale del Genio Civile* ... 576
High frequency vibrator. Berthier. *Revue des Materiaux* ... 662
High-strength concrete — Principles. Collins. *Constructional Review* ... 490
Highway engineering. Ritter and Paquette. The Ronald Press Co. ... 851
Hipped plate and shell roof construction in reinforced concrete. Krysztal. *Journal of the Institution of Engineers Australia* ... 661
Hoisting, transport and support of reinforced concrete piles. Huber. *Cement* ... 81
Holter system, The. *Roads and Road Construction* 757
Hoyer—Prestressing system. Weinberg. *La Technique Moderne-Construction* ... 182
Hyperbolic-paraboloid concrete roofs in Czechoslovakia. Hruban. *Concrete and Constructional Engineering* ... 83

I

Inelastic behavior of engineering materials and structures. Freudenthal. John Wiley and Sons, Inc. 853
Influence charts for concrete pavements. Pickett and Ray. *Proceedings ASCE* ... 83
Influence lines at tenth-points for continuous beams. Anger. Wilhelm Ernst & Sohn ... 412
Influence lines for continuous beams. Castiglia. *Giornale del Genio Civile* ... 81
Influence of fineness on initial and ultimate strength of portland cement. Gruender and Tabbah. *Zement-Kalk-Gips* ... 759
Influences on concrete. Kleinlogel. Frederick Ungar Publishing Co. ... 84
Influences on concrete and reinforced concrete. Kleinlogel. Wilhelm Ernst & Sohn ... 266
Insulating slabs — Wood-cement. Thuilleaux. *Revue des Materiaux* ... 407
Insulation—Heat—Sound. Glover. *Reinforced Concrete Review* ... 405
Interpretation of the specifications for the design of prestressed reinforced concrete members. Rusch. *Beton-u. Stahlbetonbau* ... 492
Introduction to experimental stress analysis, An. Lee. John Wiley and Sons, Inc. ... 416

Investigation of load distribution between reinforced concrete floor slabs and their formwork. Nielsen. *Bulletin, Swedish Cement and Concrete Research Institute* ... 178
Investigation of the composition and properties of porous concretes. Birebent. *Annales de L'Institut Technique du Batiment et des Travaux Publics, Beton, Beton Arme* ... 577
Investigation of the stability of the trisulfate form of calcium sulfoaluminate. Lafuma and Brocard. *Technical Publication, Centre d'Etudes et de Recherches de l'Industries des Liants Hydrauliques* ... 84

J

Joint sealers—Comparison. *Report, Michigan State Highway Dept.* ... 346
Joints—Pavement. *Report, Michigan State Highway Dept.* ... 346

L

Laterally loaded plane structures and structures curved in space. Baron and Michalos. *Proceedings ASCE* ... 662
Lectures on reinforced concrete. Paris. Dunod ... 492
Lightweight aggregate—Foamed slag. *Building Industry Distributors Course B* ... 265
Lightweight concrete. Dutron. *Annales de L'Institut Technique du Batiment et des Travaux Publics* ... 180
Lightweight concrete—Properties. *Cement* ... 344
Load-carrying capacity of long reinforced concrete columns. Hruban. *Transactions of the Dr. E. Benes' Technical University* ... 754
Load-transfer devices — Pavement. *Report, Michigan State Highway Dept.* ... 346
Long-span reinforced concrete girder bridges prestressed with wire ropes and supplementary compound. Dischinger. *Beton-u. Stahlbetonbau* 576

M

Magnel—Prestressing system. Weinberg. *Technique Moderne-Construction* ... 182
Magnel-Blaton system of prestressing, The. May. *Reinforced Concrete Review* ... 405
Management — Construction. *Engineering Societies Library* ... 577
Manual on quality of materials. American Society for Testing Materials ... 664
Manufactured concrete products and the water problem. Levy. *Revue des Materiaux* ... 574
Manufacturing process of Ferrari type ferric cement. Ferrari. *Il Cemento* ... 411
Mass concrete—Vibration. Fritsch. *Civil Engineering and Public Works Review* ... 755
Materials—Inelastic behavior. Freudenthal ... 853
Materials of construction. Bateman. Pitman Publishing Corp. ... 342
Measurement of the apparent density of an aggregate. Destable. *Annales de L'Institut Technique du Batiment et des Travaux Publics, Essais et Mesures* ... 754
Measurement of the forces, and their variation, in accessible wires in prestressed concrete structures as applied to the Sclayn Bridge. Dehan and Louis. *Annales des Travaux Publics de Belgique* ... 183
Measurement of vibrations in freshly placed concrete, The. Whiffin, Morris and Smith. *Magazine of Concrete Research* ... 573
Mechanically determining the time of set of portland cement by means of the spissograph. Glantz and Halsted. *ASTM Bulletin* ... 490
Meter to determine air content of fresh concrete. Craven. *Commonwealth Engineer* ... 575
Method of design for shell concrete roofs using prestressed edge beams, A. Silvers. *Magazine of Concrete Research* ... 580
Method of determining quick hardening of mortar and pozzolana pastes, A. Parissi. *Giornale del Genio Civile* ... 341
Michigan test road—nine year progress report, The. Michigan State Highway Dept ... 346
Mixer—Tilting drum—Tests. Joisel. *Annales de L'Institut Technique du Batiment et des Travaux Publics, Materiel du Chantier* ... 756
Modern structures in Sweden. De Cuyper. *Annales des Travaux Publics de Belgique* ... 344
Modern trends in arch dam construction and design. Jaeger. *Civil Engineering and Public Works Review* ... 758
Modulus of elasticity — Rocks — Determination. Habib. *Annales de L'Institut Technique du Batiment et des Travaux Publics* ... 408
Moment distribution—Cross. Le Nobel. *De Ingenieur* ... 495
Moment distribution—Hardy Cross. Dall'aglio. *Giornale del Genio Civile* ... 82
Moment distribution analysis of two-span arched frames with elastic pier. Revelise. *Public Roads* 579
Monolithic buildings. *Cement och Betong* ... 491
Mortar — Lime — Hardening process. Alberti. *Cement-Kalk-Gips* ... 179
Mortar—Quick hardening. Parissi. *Giornale del Genio Civile* ... 341
Multistory rigid frames. Hruban ... 573

N

Natural and artificial cooling of the concrete for a dam. Fujita. *Journal of the Japan Society of Civil Engineers* ... 177
New all-concrete railroad station in the Netherlands. Schelling. *De Ingenieur* ... 413
New Danish concrete and reinforced concrete specifications. *Dansk Ingenioerforening* ... 412
New findings, new precautions in regard to the decomposition of mortars and concrete in sea water. Dubrisay and Lafuma. *Revue des Materiaux* ... 663
New manual for construction of silos. Meyer. *Beton-Teknik* ... 407
New means of measuring plasticity. Berthier. *Revue des Materiaux* ... 179
New method of measuring hydration of hydraulic binders. Rey. *Revue des Materiaux* ... 574
New prestressed concrete De Smet Bridge over the canal at Ghent, Belgium, The. Riessauw, Dooms, Van Cauwenberge and Vandepitte. *Annales Des Travaux Publics De Belgique* ... 180
New Saint Nicolo bridge — Florence, The. Morandi. *Gionale del Genio Civile* ... 341
New Sclayn bridge (Namur), 426-ft prestressed concrete structure over the Meuse, The. *La Technique des Travaux* ... 87
No-fines concrete. Dutron. *Annales de L'Institut Technique du Batiment et des Travaux Publics* .. 180
Nomograms for concrete design. Heman. *Cement* 580

O

Oblique flexure. Castell. *Instituto Tecnico de la Construccion* ... 850
Observations derived from testing an actual arch model built of expansive cement concrete. Rinaldi. *Giornale del Genio Civile* ... 406
Observations from a year of travel. Lenhart. *Rock Products* ... 662
Overdeterminate frames—Solution. Assinaire. *Cahiers du Centre Scientifique et Technique du Batiment* ... 408

P

Paints — Cement-base — Testing. Spurgeon. *ASTM Bulletin* ... 577
Partitions function as columns. Weidlinger. *Architectural Record* ... 661
Pavement—Influence charts. Pickett and Ray. *Proceedings, ASCE* ... 83
Pavements—Netherlands. Kanstein. *Cement* ... 759
Pavements — Rolled — Holter system. *Roads and Road Construction* ... 757
Pavements—Temperature stresses. Bergstrom. *Proceedings, Swedish Cement and Concrete Institute* ... 85
Piles—Reinforced concrete. Huber. *Cement* ... 81
Piles 87 ft long at Plymouth. *Concrete and Constructional Engineering* ... 661

Pipe—Porous. Hamer. *Cement*..... 83
Plane-linear structures — Analysis. Torrojo. *Instituto Tecnico de la Construccion*..... 851
Plant engineering handbook. Staniar. McGraw-Hill Book Co..... 491
Plastic design theory for reinforced and prestressed concrete shell roofs, A. *Magazine of Concrete Research*..... 575
Plastic flow—Prismatic solids. Levi. *Giornale del Genio Civile*..... 81
Plasticity—Measurement. Berthier. *Revue des Materiaux*..... 179
Plates — Ribbed — Design. Danusso. *Il Cemento* 489
Plates and shells. Girkmann. Springer..... 496
Porous concrete — Composition. Birebent. *Annales de L'Institut Technique du Batiment et des Travaux Publics, Beton, Beton Arme*..... 577
Ports—Reconstruction. Strongoli. *Giornale del Genio Civile*..... 82
Possibility of saving steel in reinforced concrete frames. Hruban and Svab. *Transactions of the Dr. E. Benes' Technical University*..... 753
Power savings and production increase through concentric compartmentation of rotary grinding mills for cement. Pralle. *Zement-Kalk-Gips*... 85
Pozzolan — Quick hardening. Parissi. *Giornale del Genio Civile*..... 341
Pozzolans — Calcination — Mass concrete — Sulfate resistant—Alkali aggregate reaction. *Special Technical Publication ASTM*..... 342
Practical design of solid-barrel, reinforced-concrete skew structures. Weiner. *Proceedings ASCE*.. 409
Practical statics. Saliger. Franz Deuticke..... 414
Precast concrete—Building members. *Revue des Materiaux*..... 265
Precast concrete—Building slabs. *Concrete and Constructional Engineering*..... 668
Precast concrete—Floors. Amos and Bochmann. *Deutsches Ausschuss Stahlbeton*..... 83
Precast concrete—Shell roof. Hruban. *Concrete and Constructional Engineering*..... 83
Precast reinforced concrete rigid frames. Munz. *La Technique Moderne-Construction*..... 408
Precise measurements of deformation in compression tests. Berthier. *Revue des Materiaux*.. 490
Prefabricated apartment house construction. Stokla. *Cement*..... 667
Prefabrication of concrete members. *Revue des Materiaux*..... 265
Preliminary testing of an arch dam for water tightness and internal stresses. Ehrmann. *La Technique Moderne-Construction*..... 86
Preparation of concrete aggregate, The. Pochin. *Reinforced Concrete Review*..... 573
Prestressed concrete. Campus. *Revue de Metallurgie*..... 409
Prestressed concrete. *Deutscher Beton-Verein*.... 494
Prestressed concrete. Dischinger. *Beton-u. Stahlbetonbau*..... 576
Prestressed concrete. Magnel. Concrete Publications Ltd..... 666
Prestressed concrete — Anchorage. Rinaldi. *Giornale del Genio Civile*..... 667
Prestressed concrete—Bridge. Riessauw, Dooms, Van Cauwenberge and Vandepitte. *Annales des Travaux Publics de Belgique*..... 180
Prestressed concrete—Bridge. Storrer. *Annales des Travaux Publics de Belgique*..... 183, 267
Prestressed concrete—Bridges. *La Technique des Travaux*..... 87
Prestressed concrete—Concrete stress distribution. Prentis. *Magazine of Concrete Research*..... 850
Prestressed concrete — Construction. Rusch. *Betong*..... 668
Prestressed concrete — Continuous bridge. *Reinforced Concrete Review*..... 405
Prestressed concrete — Continuous bridges. *Concrete and Constructional Engineering*..... 661
Prestressed concrete—Continuous girder. Magnel. *Science et Technique*..... 89
Prestressed concrete—Design. *Beton-u. Stahlbetonbau*..... 492
Prestressed concrete—Design. Rusch. *Beton-u. Stahlbetonbau*..... 492
Prestressed concrete—Design. Baker. *Magazine of Concrete Research*..... 575
Prestressed concrete—Edge beams. Silvera. *Magazine of Concrete Research*..... 580
Prestressed concrete—Floor joists. Masterman. *Civil Engineering and Public Works Review*.... 754
Prestressed concrete — Hangars. Duyster. *Bulletin, Cement and Concrete Assn.*..... 178
Prestressed concrete — Light tower. Tourry. *Travaux*..... 755
Prestressed concrete — Prestressing device. Morandi. *Giornale del Genio Civile*..... 667
Prestressed concrete — Pre-tensioning — post-tensioning. Lazarides. *Magazine of Concrete Research*..... 852
Prestressed concrete—Railroad ties. *Publication, Instituto Tecnico de la Construccion y del Cemento* 578
Prestressed concrete—Research. Friedrich. *Final Report, International Assn. of Bridge and Structural Engineering*..... 408
Prestressed concrete—Test. *Magazine of Concrete Research*..... 573
Prestressed concrete—Tests. Baar. *Cement*..... 87
Prestressed concrete — Theory. *Reinforced Concrete Review*..... 184
Prestressed concrete—Various systems of prestressing—Weinberg. *La Technique Moderne Construction*..... 182
Prestressed concrete — Wires — Fatigue. Soete and Vancrombrugge. *Annales des Travaux Publics de Belgique*..... 664
Prestressed concrete — Wires — Forces. Dehan and Louis. *Annales de Travaux Publics de Belgique*..... 183
Prestressed concrete bridges over the Marne river. Starink. *Cement*..... 343
Prestressed concrete work in Great Britain. *Cement and Concrete Assn.*..... 178
Prestressing — Magnel-Blaton system. May. *Reinforced Concrete Review*..... 405
Prestressing — Redundant structures. Raineri. *Giornale del Genio Civile*..... 341
Prestressing—Shell roofs. Cousins. *Reinforced Concrete Review*..... 575
Principles of making high-strength concrete, The. Collins. *Constructional Review*..... 490
Problem of anchoring wire strands in prestressed reinforced concrete structures, The. Rinaldi. *Giornale del Genio Civile*..... 667
Problem of prestressing redundant structures, The. Raineri. *Giornale del Genio Civile*..... 341
Proceedings — Building Council. *Cahier, Centre Scientifique et Technique du Batiment*..... 850
Proceedings of the German Concrete Assn. *Deutscher Beton-Verein*..... 494
Process for the manufacture of prestressed concrete floor joists. Masterman. *Civil Engineering and Public Works Review*..... 754
Producing gravel for McNary Dam. Lenhart. *Rock Products*..... 665
Progress in construction of concrete structures. Rusch. *Betong*..... 668
Progress in reinforced concrete. Saliger. Franz Deuticke..... 343
Properties of lightweight concrete. Graf. *Cement* 344
Public Buildings—Economy. *Civil Engineering*.. 90
Putting more sense into the public construction dollar. *Civil Engineering*..... 90

Q

Quality control — Concrete. Mercer. *Commonwealth Engineer*..... 754
Quality control—Materials..... 664
Quenching of clinkers from rotary kilns. Uhlig. *Zement-Kalk-Gips*..... 81

R

Railroad ties—Prestressed concrete. Meier. *Publication, Instituto Tecnico de la Construccion y del Cemento*..... 578
Rapid analysis of arch bridges. Priolo. *Giornale del Genio Civile*..... 405, 489
Rapid design of reinforced concrete slabs and beams, The. *Civil Engineering and Public Works Review*..... 406
Rationalization of concrete building construction. Dahlberg. *Beton og Jernbeton*..... 409
Recent research on prestressed concrete. Friedrich. *Final Report, International Assn. of Bridge and Structural Engineering*..... 408

Recent research on vibration of fresh concrete. L'Hermite. *Cahiers du Centre Scientifique et Technique du Batiment* ... 178
Reclamation works—Economy. *Civil Engineering* 90
Reconstruction—Bridges. Rinaldi. *Giornale del Genio Civile* ... 177
Reconstruction of a quay at Wallsend. *Concrete and Constructional Engineering* ... 756
Reconstruction of Berck light tower in prestressed concrete. Tourry. *Travaux* ... 755
Rectangular foundation slab, The. Halbritter. *Die Bautechnik* ... 82
Rectangular plate, elastically supported along its edges, under any condition of loading. Pozzati. *Giornale del Genio Civile* ... 407, 661
Rectangular slabs subjected to flexure of loads normal to their plane. Monge. *Instituto Tecnico de la Construccion y del Cemento* ... 850
Redundant structures—Prestressing. Raineri. *Giornale del Genio Civile* ... 341
Re-erection of the Ruther Leine bridge damaged by flood in 1946. Meiners. *Beton-u. Stahlbetonbau* 491
Reinforced concrete construction. Saliger. F.Deuticke 267
Reinforced concrete design, Supplement. *Czechoslovakian Society for Regulations* ... 181
Reinforced concrete freight depots, All. Gasc. *La Technique Moderne-Construction* ... 88
Reinforced concrete residential flats at Edinburgh. *Concrete and Constructional Engineering* ... 754
Reinforced concrete sections subject to unsymmetrical bending. Hruban. *Technicky Obzor* ... 265
Reinforced concrete trusses. Eymar. *Instituto de la Construccion y del Cemento* ... 851
Reinforcement—Compression—Beams. Johnson. *Betong* ... 88
Reinforcement—European. Saliger. ... 343
Reinforcement—Two-way. Nylander. *Betong* ... 91
Relation of thermal expansion of aggregates to the durability of concrete, The. Callan. *Bulletin, Waterways Experiment Station* ... 342
Report preparation. Kerekes and Winfrey. Iowa State College Press ... 759
Resistance to fatigue of wires used in prestressed concrete. Soete and Vancrombrugge. *Annales des Travaux Publics de Belgique* ... 664
Retarding agents produce unstable equilibrium. Levi. *Giornale del Genio Civile* ... 490
Ribbed Floor—Analysis—Load Tests. Soutter. *Bulletin Technique de la Suisse Romande* ... 665
Rigid frame bridge, The. Hayden and Barron. John Wiley and Sons, Inc. ... 415
Rigid frame design. Grossi. *Giornale del Genio Civile* ... 82
Rigid frame design. Zerner. *Beton-u. Stahlbetonbau* ... 576
Rigid frame structures computed without solving linear equations. Dall'Aglio. *Giornale del Genio Civile* ... 490
Rigid frames — Multistory. Hruban. ... 573
Rigid frames—Precast. Munz. *La Technique Moderne-Construction* ... 408
Rigid frames—Skew angle. Bower. *Proceedings ASCE* ... 341
Roads—Danish. *Beton-Teknik* ... 573
Roads—Danish. Helwigh. *Beton-Teknik* ... 578
Roads—Rideability. Boesgaard. *Beton-Teknik* ... 577
Roofs—Flat slab insulation. Ramboell. *Beton og Jernbeton* ... 493
Rotary grinding—Economy. Pralle. *Zement-Kalk-Gips* ... 85
Rotary kilns—Quenching clinker. Uhlig. *Zement-Kalk-Gips* ... 81

S

Sawdust concrete. *Constructional Review* ... 663
Sclayn Bridge over the Meuse, The. Storrer. *Annales des Travaux Publics de Belgique* ... 183, 267
Scottish hydro-electric works. *Concrete and Constructional Engineering* ... 668
Sea water—Concrete. Nicol. *Revue des Materiaux* 82
Sea water—Concrete deterioration—Precautions. Dubrisay and Lafuma. *Revue des Materiaux* ... 48
Selection of a preliminary triangular section for gravity dams. Sarkaria. *Civil Engineering and Public Works Review* ... 753
Settlement correction at La Guardia field. Kyle. *Proceedings ASCE* ... 491
Shell construction—Advantages. Van der Schrier. *Cement* ... 266
Shell roofs—Concrete. Hruban. *Concrete and Constructional Engineering* ... 83
Shells—Analysis. Chambaud. *Annales de L'Institut Technique du Batiment et des Travaux Publics* ... 84
Shrinkage—Prismatic solids. Levi. *Giornale del Genio Civile* ... 81
Skew slab—Study. Gossard, Siess, Newmark and Goodman. *University of Illinois Engineering Experiment Station Bulletin* ... 82
Skin stresses developed in analyzing domes. Zanaboni. *Giornale del Genio Civile* ... 178
Sheathing — Influence — Rigid frame. Zerner. *Beton-u. Stahlbetonbau* ... 576
Shell roof—Design. Kryszтal. *Journal of the Institution of Engineers Australia* ... 661
Shell roofs—Design. Baker. *Magazine of Concrete Research* ... 575
Shell roofs—Design. Silvera. *Magazine of Concrete Research* ... 580
Shell roofs—Prestressing. Cousins. *Reinforced Concrete Review* ... 575
Shells—Cylindrical—Boundary problems. Hruban. *Transactions of the Dr. E. Benes' Technical University* ... 753
Shells—Design. Girkmann ... 496
Shrinkage—Lightweight concrete. Graf. *Cement.* 344
Silos — Construction — Danish practice. Meyer. *Beton-Teknik* ... 407
Simplified formulas for strength computation of rectangular reinforced concrete beams without the use of tables. Camiz. *Giornale del Genio Civile* ... 490
Skew angle—Rigid frames. Bower. *Proceedings ASCE* ... 341
Skew structures—Design. Weiner. *Proceedings ASCE* ... 409
Skewed bridge—Design. Hayden and Barron ... 415
Slab—Flat—Design. Haas ... 255
Slabs — Crack formation. Graf and Walz. *Deutsches Ausschuss Stahlbeton* ... 86
Slabs—Design. Pozzati. *Giornale del Genio Civile* ... 407
Slabs—Design. Sefton. *Civil Engineering and Public Works Review* ... 406
Slabs—Load distribution. Nielsen. *Bulletin, Swedish Cement and Concrete Research Institute* ... 178
Slabs—Strength. Graf and Walz. *Deutsches Ausschuss Stahlbeton* ... 86
Slag—Cement. Brocard. *Revue des Materiaux* ... 662
Slag—Cement manufacture. Blondiau. *Revue des Materiaux* ... 851
Slag—Foamed. *Building Industry Distributors Course B* ... 265
Slag cement—Alkali-aggregate reaction. Cox, Coleman, and White. *Pit and Quarry* ... 850
Soil drainage by porous concrete pipe. Hamer. *Cement* ... 83
Some experiments on the load distribution in bond tests. Wilkins. *Magazine of Concrete Research* 853
Some ideas on vacuum concrete. Leviant and De la Sayette. *Revue des Materiaux* ... 663
Some preliminary investigations in the use of bamboo for reinforcing concrete. Mehra, Uppal and Chadda. *Indian Concrete Journal* ... 853
Some technical and economic considerations of the Swedish 1949 specifications. Hasselblad. *Cement och Betong* ... 408
Sonic testing — Concrete. Chefdeville and Dawance. *Annales de L'Institut Technique du Batiment et des Travaux Publics* ... 181
Specification for concrete work. Manning. *Concrete and Constructional Engineering* ... 662
Specifications—Danish. *Dansk Ingeniorforening* 412
Specifications — Denmark — Finland — Norway — Sweden — Germany — ACI. Themner. *Cement och Betong* ... 414
Specifications — Materials — Swedish. *Dept. of Communications* ... 414
Specifications — Prestressed concrete. Rusch. *Beton-u. Stahlbetonbau* ... 492
Specifications — Swedish — 1949. Hasselblad. *Cement och Betong* ... 408
Specifications for the design of prestressed reinforced concrete members. *Beton-u. Stahlbetonbau* 492
Spissograph. Glantz and Halsted. *ASTM Bulletin* ... 490

Statical diary. Stador. Karl Marklein 266
Statics—Practical. Saliger 41
Statue—Concrete. Carasso. *Cement* 41
Steel joists used for reconstruction of permanent small span reinforced concrete bridges. Rinaldi. *Giornale del Genio Civile* 177
Strain gages — Interior mounting. Wilkins. *Magazine of Concrete Research* 853
Strength variations of hydrated binders. Chassevant and Domine. *Revue des Materiaux* 573
Stress — Dynamic — Determination. *Technical Publication ASTM* 177
Stress analysis—Elementary. Soneson 267
Stress analysis — Experimental. Hetenyi 415
Stress analysis — Experimental. Lee 416
Strontium and barium cements. Bronski. *Cement and Lime Manufacture* 266
Structural theory. Sutherland and Bowman. John Wiley & Sons, Inc. 411
Structural theory and design, V. 1. Young. Crosby Lockwood & Son, Ltd. 489
Study of clinker bricks in rotary cement kilns. Halm and Lapoujade. *Revue des Materiaux* 490
Study of curved walls for tanks and a simple method of design. Belluzzo. *Giornale del Genio Civile* 405
Studies of highway skew slab-bridges with curbs—Part II. Laboratory research. Gossard, Siess, Newmark and Goodman. *University of Illinois Engineering Experiment Station Bulletin* 82
Study of reinforced concrete walls and deep beams. A. Nylander and Holst. *Transactions of the Royal Technical University* 410
Sulfate susceptibility test for portland cements, A. Taylor and Bogue. *Journal of Research,* ... 407
Study of the determination of the heat of hydration of portland cement, A. Newman. *Journal of Research* 491
Study of the influence of sheathing on the distribution of moments of statically indeterminate structures. Zerner. *Beton-u. Stahlbetonbau* 576
Surfaces—Color—Texture. Wilson. *Reinforced Concrete Review* 574
Swedish state concrete specifications, Part I—Materials. *Statens Offentliga Utredningar* 414
Symposium on dynamite stress determinations. *Special Technical Publication ASTM* 177
Symposium on monolithically-cast concrete buildings. *Cement och Betong* 491
Symposium on use of pozzolanic materials in mortars and concretes. *Special Technical Publication ASTM* 342

T

Tanks—Curved. Belluzzo. *Giornale del Genio Civile* 405
Tanks—Design. Favini. *Giornale del Genio Civile* 178
Tanks—Prestressed—Design. Crom. *Proceedings ASCE* 407
Temperature stresses in concrete pavements. Bergstrom. *Proceedings, Swedish Cement and Concrete Institute* 85
Tension test on cylindrical or prismoidal specimens. Prot. *Revue des Materiaux* 850
Test of a continuous prestressed concrete girder. Magnel. *Science et Technique* 89
Test road—Michigan. *Report, Michigan State Highway Dept.* 346
Testing cement base paints and dampproofers. Spurgeon. *ASTM Bulletin* 577
Tests of a tilting-drum concrete mixer. Joisel. *Annales de L'Institut Technique du Batiment et des Travaux Publics, Materiel du Chantier* 756
Tests of prestressed concrete. Baar. *Cement* 87
Tests to determine the crack formation and strength of reinforced concrete slabs with various reinforcing steels under gradually increasing loads. Graf and Walz. *Deutsches Ausschuss Stahlbeton* 86
Test to determine the interaction of prefabricated elements of reinforced concrete floors. Amos and Bochmann. *Deutsches Ausschuss Stahlbeton* 83
Theory of deflections of solid web girders, The. Herzka. Springer-Verlag 495
Thermal and moisture expansion studies of some domestic granites. Hockman and Kessler. *Journal of Research* 84
Thermal expansion — Aggregates. Callan. *Bulletin, Waterways Experiment Station* 342
Thin shell roof construction. Van der Schrier. *Cement* 266
Thin-shell structures in Spain. Torroja. *Annales de L'Institut Technique du Batiment et des Travaux Publics; Beton, Beton Arme* 575
Torsion—Beams. Cowan. *Magazine of Concrete Research* 575
Torsion in reinforced concrete structures. Castiglia. *Il Cemento* 489, 579
Transfer of moments and deformations in concrete beams submitted to long-time loads. Johnson. *Betong* 494
Translucent concrete. *Reinforced Concrete Review* 184
Trusses—Design. Eymar. *Instituto de la Construccion y del Cemento* 851
Tubes — Cylindrical — Analysis. Paschoud. *Bulletin Technique de la Suisse Romande* 756
Tunnels — Construction. *Concrete and Constructional Engineering* 663
Two new concrete roads. Helwig. *Beton Teknik* . 578

U

Ultimate design — Reinforced concrete. *Czechoslovakian Society for Regulations* 181
Ultimate design of concrete structures. Hruban. . 574
Ultimate load — Two-way slab. Nylander. *Betong* 91
Ultimate span of arches, The. Brendel. *Beton-u. Stahlbetonbau* 83
Ultimate strength of rectangular reinforced concrete beams. Cowan. *Civil Engineering and Public Works Review* 755
Use of accelerators in the manufacture of concrete products. Thuilleaux. *Revue des Materiaux* ... 177
Use of accelerators in the manufacture of insulating slabs of cement-fiber composition. Thuilleaux. *Revue des Materiaux* 407
Use of fly ash as structural material, The. Korth. *Bauplannung Bautechnik* 88

V

Vacuum concrete — Application. Leviant and De la Sayette. *Revue des Materiaux* 663
Vallette — Prestressing system. Weinberg. *La Technique Moderne-Construction* 182
Vibrated mass concrete. Fritsch. *Civil Engineering and Public Works Review* 755
Vibration—Fresh concrete. L'Hermite. *Cahiers du Centre Scientifique et Technique du Batiment* 178
Vibration — Fresh concrete. Whiffin, Morris and Smith. *Magazine of Concrete Research* 573
Vibrator — High frequency. Berthier. *Revue des Materiaux* 662
Vierendeel trusses—Design. Pascale. *Giornale del Genio Civile* 81

W

Walls—Failure. Nylander and Holst. *Transactions of the Royal Technical University* 410
Water-cement ratio—Concrete products. Levy. *Revue des Materiaux* 574
Waterproofing — Underground structures. Poirson. *Annales le L'Institut Technique du Batiment et des Travaux Publics* 576
Waterproofing agents — Concrete products. Levy. *Revue des Materiaux* 574
Watertightness of structures—I, II. Duriez. *La Technique Moderne-Construction* 85
Weather and the building industry. *Building Research Advisory Board,* 82
Wind-load standards in Europe. Van Erp. *Proceedings ASCE* 409
Winter concrete—Electrical treatment. Haller. *Civil Engineering and Public Works Review* 756
Work of Oscar Niemeyer. Papadeki. Reinhold Publishing Co. 852